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LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CHANNAVAJJALA, SRIRAMA T	
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			2166	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,866

Applicant(s)

ZYBURA ET AL.

Examiner

Srirama Channavajjala

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2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-33 are presented for examination.

Drawings

2. The Drawings filed on 9/24/2003 are acceptable for examination purpose. In the present application applicant's drawing figs 1-8 fail to show every feature of the invention specified in the claims for example **claim 1** is directed to "***A method for synchronizing information in namespaces, comprising: receiving an indication of a change to information in a first namespace; based on the indication, determining if an entity exists in a second namespace related to the information; if so, determining if the entity has a characteristic that conflicts with the information; and if a conflict exists, modifying the entity to resolve the conflict prior to applying the change to the second namespace***" Therefore, each specific function must be shown or the feature(s) canceled from the claim(s), A proposed drawing are required in reply to the Office action.

No new matter should be entered.

Information Disclosure Statement

3. The information disclosure statement filed on 9/24/2003 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-33 is rejected under 35 U.S.C. 101 because invention is directed to non-statutory subject matter.

5. As to claim 1, *"A method for synchronizing information in namespaces, comprising: receiving an indication of a change to information in a first namespace; based on the indication, determining if an entity exists in a second namespace related to the information; if so, determining if the entity has a characteristic that conflicts with the information; and if a conflict exists, modifying the entity to resolve the conflict prior to applying the change to the second namespace"* is directed to "abstract idea" because all of the elements in the claim 1 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software, such that the method is software, per se, is "non-statutory subject matter" and **claim 1** do not have "practical application" because the "final result" by the claimed invention in the claim 1 elements particularly, *determining if an entity exists in a second namespace related to the information; if so, determining if the entity has a characteristic that conflicts with the information; and if a conflict exists, modifying the entity to resolve the conflict prior to applying the change to the second namespace* is not producing "useful, tangible and concrete" and therefore, claim 1 is a non-statutory subject matter.

6. The claims 2-12 dependent from claim 1 is also rejected in the above analysis

7. As to claim 13, *“A method for synchronizing information in namespaces, comprising: receiving an indication of a change to information in a first namespace; based on the indication, determining if an entity exists in a second namespace related to the information; if not, creating a representation of the entity within the second namespace”* is directed to “abstract idea” because all of the elements in the claim 13 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software, such that the method is software per se is “non-statutory subject matter”, and claim 13 do not have “practical application” because the “final result” by the claimed invention in the claim 13 elements particularly, *determining if an entity exists in a second namespace related to the information; if not, creating a representation of the entity within the second namespace*” is not producing “useful, tangible and concrete” results, and therefore, claim 13 is a non-statutory subject matter.

8. The claims 14-20 dependent from claim 13 is also rejected in the above analysis

9. As to claim 21, *“A technique for synchronizing entities within two namespaces, comprising: while synchronizing the two namespaces: identifying a conflict between a change notification received from a first namespace and a state of information within a second namespace; creating a temporary entity within the second namespace that allows the synchronization to proceed without interference by the conflict; and if the conflict becomes resolved such that the temporary entity is no longer necessary, removing the temporary entity”* is directed to “abstract idea” because all of the elements in the claim 21 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software, such that the method is software per se is “non-statutory subject matter”, and claim 21

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do not have "practical application" because the "final result" by the claimed invention in the claim 21 elements particularly, *creating a temporary entity within the second namespace that allows the synchronization to proceed without interference by the conflict; and if the conflict becomes resolved such that the temporary entity is no longer necessary, removing the temporary entity*" is not producing "useful, tangible and concrete" results, and therefore, claim 21 is a non-statutory subject matter.

10. The claims 22-23 dependent from claim 21 is also rejected in the above analysis.

11. As to claim 24, "*A computer-readable medium encoded with a data structure, comprising: a plurality of entities, each entity having a first field having a name, the name being unique across each entity in the data structure; a second field having an identity, the identity being globally unique; and a third field having a phantom property, the phantom property being operative to distinguish between a first state of the entity and a second state of the entity*" is directed to "abstract idea" because all of the elements in the claim 24 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software or simply computer code, is considered to be software per se, furthermore, "**computer readable medium**" lack storage on a suitable computer-readable medium, in other words,

(i) **which is not stored on an appropriate computer readable medium**

(ii) fails to meet the IEEE definition of a data structure;

are not able to realize any functionality and are thus not statutory;

It is also noted that claim 24 do not have ***“practical application”*** because the “final result” by the claimed invention in the claim 24 elements particularly, *a plurality of entities, each entity having a first field having a name, the name being unique across each entity in the data structure; a second field having an identity, the identity being globally unique; and a third field having a phantom property, the phantom property being operative to distinguish between a first state of the entity and a second state of the entity”* is not producing “useful, tangible and concrete” results, and therefore, claim 24 is a non-statutory subject matter.

12. As to claim 25, *“A computer-readable medium having computer-executable components, comprising: a synchronization environment having an associated external namespace, an associated central namespace, and a synchronization mechanism, the synchronization mechanism being configured to receive change information from the external namespace.....collisions and the placeholder component being operative to avoid dangling references ”* is directed to “abstract idea” because all of the elements in the claim 25 would reasonably be interpreted by one of ordinary skill in light of the disclosure as software or simply computer code, is considered to be software per se, furthermore, ***“computer readable medium”*** lack storage on a suitable computer-readable medium, in other words, ***which is not stored on an appropriate computer readable medium.***

It is also noted that claim 25 do not have ***“practical application”*** because the “final result” by the claimed invention in the claim 25 elements particularly, *a synchronization environment having an associated external namespace, an associated central*

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namespace, and a synchronization mechanism, the synchronization mechanism being configured to receive change information from the external namespace.....collisions and the placeholder component being operative to avoid dangling references” is not producing “useful, tangible and concrete” results, and therefore, claim 24 is a non-statutory subject matter.

13. The claims 26-33 dependent from claim 25 is also rejected in the above analysis

It is noted that, “computer-readable instructions, data structures, may cover the definition of “carrier wave” [see specification page 21, line 25], therefore, claims 12,20,24-33 are “*non statutory as the claims are not tangible*”.

For “General Analysis for Determining Patent-Eligible Subject Matter”, see 101 Interim Guidelines as indicated below:

<<<http://www.uspto.gov/web/offices/pac/dapp/ogsheet.html>>>

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1,13,21,24,25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 13, 22,26 of co pending Application No. **10/671,408**, filed on 9/24/2003. Although the conflicting claims are not identical, they are not patentably distinct from each other because in the present application Independent Claims 1,13,21,25,directed to method

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for synchronizing information in namespaces, comprising: receiving an indication of a change to information in a first namespace; based on the indication, determining if an entity exists in a second namespace related to the information, if so,.....with the information; and if a conflict exists,second namespace ; while co-pending Application No **10/671,408** claims 1,13,22,26 are directed to 'receiving an indication of a change to an attribute of a first external object in a first namespace, the change including a reference to a second external object in the first namespace;, identifying a first.....second namespace the first central object.....first namespace; identifying second central object....second namespace that corresponds to the secondfirst namespace; identifying another externalsecond namespace; and prorogating the data to the other external object. It would have been obvious one of the ordinary skill in the art at the time of the applicant's invention to add or drop limitation in order to arrive at the same results, for example in the present application dropping the limitation such as "reference to a second external object in the first namespace", object corresponds to the first external object in the first namespace; second namespace that corresponds to the second external object in the first namespace” or vice versa may be used in synchronizing information in namespaces particularly modifying the entity or related attributes to identify conflicts, and determining object characteristics. Accordingly, the instant Claims are very broad and within the scope of the Claims of the Application No. **10/671,408**.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. *Claim 1-15,20-23,25-31, are rejected under 35 U.S.C. 103(a) as being unpatentable over Thatcher et al. [hereafter Thatcher], US Patent No. 6061743 published on May 9, 2000 in view of Karamanolis et al. [Karamanolis], US Pub.No. 20030131104, published on July 10,2003 .*

18. As to claim 1, 12, 13, 20, Thatcher teaches a system which including 'synchronizing information in namespaces' [col 5, line 47-52, col 6, line 48-53], distributed directory typically containing different objects with distinguished names or "DN" which is a unique reference that identifies an object distinct identity and location within a distributed directory associated with "namespace" [col 5, line 47-52];

'receiving an indication of a change to information in a first namespace' [col 7, line 60-67], Thatcher specifically teaches change information in the namespace, for example rading, writing deleting information related to namespace that corresponds to change to information in a first namespace. It is also noted that Thatcher specifically teaches host namespace fig 3, element 51, and foreign namespace, fig 3, element 54, first namespace corresponds to fig 3, element 51;

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'based on the indication, determining if an entity exists in a second namespace related to the information' [col 8, line 24-27, line 45-52], Thatcher specifically teaches host namespace, foreign namespace and association between these two namespaces, further Thatcher also teaches each namespace has a separate line in the namespace table i.e., namespace name, namespace class file and like in a namespace table [col 8, line 31-38]. It is also noted that Thatcher establishes relationship between foreign namespace and host namespace as detailed in col 8, line 45-52;

'determining if the entity has a characteristic that with the information' [col 9, line 13-41], Thatcher teaches two namespaces, particularly, host namespace, foreign namespace as detailed in fig 3, further host namespace may not know the content details of the target file, while foreign namespace keeps track of files and associated characteristics of file[s] as detailed in col 9, line 13-21;

'modifying the entity, applying the change to the second namespace' [[col 11, line 6-16, fig 5], Thatcher teaches interface module specifying target to access the host namespace, further determines whether target is a container object within the host namespace, and the condition is tested whether or not to add the object i.e. add children to list as detailed in fig 5 . It is however, noted that Thatcher does not specifically teach "conflicts with the information, modifying the entity to resolve the conflict". On the other hand, Karamanolis disclosed "conflicts with the information, modifying the entity to resolve the conflict" [page 2, col 2, 0031, page 6, col 1, 0071, 0072, and 0075, fig 8], Karamanolis specifically teaches conflicts between link and

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unlink operations related to namespace, further resolving conflicts due to failure occurs during execution as detailed in fig 8, page 6, col 1, 0075.

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Karamanolis et al. into aggregating disparate namespaces of Thatcher et al. because both Thatcher, Karamanolis are directed to firstly distributed network computer system [see Thatcher: fig 1; Karamanolis: fig 1], secondly, both are directed to synchronizing namespaces in a distributed computer environment [see Thatcher: col 6, line 43-50; Karamanolis: page 3, col 2, 0048, 9-116]; thirdly, both are specifically directed to namespace operations and associated namespace objects specifying the structure, entities, and relation between target and host [see Thatcher: fig 3; Karamanolis: fig 5-6], and both Thatcher, Karamanolis are from same field of endeavor.

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Karamanolis et al. into aggregating disparate namespaces of Thatcher et al. because that would have allowed users of Thatcher to performing namespace operations by incorporating "log records" to track events of both success as well as failure records as suggested by Karamanolis [see page 3, col 1, 0046], particularly conflicts between link and unlink operations, furthermore, resolving the conflicts before and after the initiated link operations related to same namespace and target objects [see Karamanolis: fig 8, page 6, col 1, 0075], also avoid locking distributed resources by serializing operations at each partition, thus bringing the

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advantages of "reduces communications overhead, reduces synchronous I/O and increases operations concurrency [see Karamanolis: page 2, col 1, 0025, line 12-14].

19. As to claim 2, Thatcher disclosed 'wherein the indication of the change comprises a notice that another entity was added to the first namespace' [col 6, line 62-67].

20. As to claim 3, Thatcher disclosed 'wherein the characteristic comprises a name of the other entity' [col 8, line 45-48].

21. As to claim 4, Karamanolis disclosed 'wherein the conflict comprises a name collision between the entity in the first namespace and the entity in the second namespace' [page 5, col 2, 0070, page 6, col 1, 0072].

22. As to claim 5, Thatcher disclosed 'wherein modifying the entity in the second namespace comprises creating an indication that the characteristic of the entity in the second namespace has been invalid' [col 9, line 56-67].

23. As to claim 6, Thatcher disclosed 'wherein creating the indication comprises associating with the entity in the second namespace an indication that the name of the entity in the second namespace is no longer valid' [col 6, line 13-23].

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24. As to claim 7, Thatcher disclosed 'wherein the information in the first namespace comprises an entity in the first namespace' [col 5, line 21-23, line 47-51, fig fig 2-3].

25. As to claim 8, Karamanolis disclosed 'wherein modifying the entity comprises altering the characteristic of the entity to eliminate the conflict' [page 6, col 1, 0077].

26. As to claim 9, Thatcher disclosed 'wherein the characteristic comprises a name of the entity [fig 2-3], and wherein altering the characteristic comprises modifying the name of the entity' [col 6, line 53-61].

27. As to claim 10, Thatcher disclosed 'wherein modifying the name comprises replacing the name with a unique identifier' [col 5, line 47-52].

28. As to claim 11, Thatcher disclosed 'wherein modifying the name comprises setting a flag associated with the entity to indicate that the name of the entity is transient' [col 6, line 43-45].

29. As to claim 14, Thatcher disclosed 'wherein the indication of the change comprises a notice of a reference to the entity in the second namespace' [col 7, line 30-36].

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30. As to claim 15, Thatcher disclosed 'wherein the reference indicates that the information in the first namespace refers to the entity in the second namespace' [fig 2-3,col 7, line 14-17].

31. As to claim 21, Thatcher teaches a system which including 'a technique for synchronizing entities within two namespaces' [fig 3, col 6, line 48-50], two namespaces corresponds to host namespace, fig 3, element 51, foreign namespace, fig 3, element 54;

'while synchronizing the two namespaces, identifying change notification received from a first namespace and a state of information within a second namespace' [col 6, line 48-61], Thatcher specifically teaches replication system to replicate or synchronize different object changes that are associated with distributed directory, particularly updates propagated to other replicates for example between host namespace and foreign namespace as detailed in col 6, line 48-61;

'creating a temporary entity within the second namespace that allows the synchronization to proceed without interference ' [col 6, line 62-67, col 7, line 1-4], Thatcher specifically teaches various object entities related to namespace for example as detailed in the table at col 6, and replicating through the replica list of a partition as detailed in col 7, line 1-4;

'temporary entity is no longer necessary, removing the temporary entity' [col 7, line 4-12].

It is however, noted that Thatcher does not specifically teach 'identifying a conflict , conflict becomes resolved'. On the other hand, Karamanolis disclosed "'identifying a conflict , conflict becomes resolved' [page 2, col 2, 0031, page 6, col 1, 0071, 0072, and 0075, fig 8], Karamanolis specifically teaches conflicts between link and unlink operations related to namespace, further resolving conflicts due to failure occurs during execution as detailed in fig 8, page 6, col 1, 0075.

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Karamanolis et al. into aggregating disparate namespaces of Thatcher et al. because both Thatcher, Karamanolis are directed to firstly distributed network computer system [see Thatcher: fig 1; Karamanolis: fig 1], secondly, both are directed to synchronizing namespaces in a distributed computer environment [see Thatcher: col 6, line 43-50; Karamanolis: page 3, col 2, 0048, 9-116]; thirdly, both are specifically directed to namespace operations and associated namespace objects specifying the structure , entities, and relation between target and host [see Thatcher: fig 3; Karamanolis: fig 5-6], and both Thatcher, Karamanolis are from same field of endeavor.

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Karamanolis et al. into aggregating disparate namespaces of Thatcher et al. because that would have allowed users of Thatcher to performing namespace operations by incorporating "log records" to track events of both success as well as failure records as suggested by Karamanolis [see page 3, col 1, 0046],

particularly conflicts between link and unlink operations , furthermore, resolving the conflicts before and after the initiated link operations related to same namespace and target objects [see Karamanolis: fig 8, page 6, col 1, 0075] , also avoid locking distributed resources by serializing operations at each partition , thus bringing the advantages of “reduces communications overhead, reduces synchronous I/O and increases operations concurrency [see Karamanolis: page 2, col 1, 0025, line 12-14].

32. As to claim 22, Karamanolis disclosed 'conflict becomes resolved by receiving a notice to delete the temporary entity' [page 3, 0037].

33. As to claim 23, Karamanolis disclosed 'wherein the conflict becomes resolved by receiving a notice to delete the temporary entity' [page 2, col 2, 0035].

34. As to claim 25, Thatcher teaches a system which including 'a synchronization environment having an associated external namespace [col 3, line 65-67,col 6, line 48-53, fig 3], Thatcher specifically teaches distributed directory synchronized database, particularly having various entries related to namespace in a database; and a synchronization mechanism, the synchronization mechanism being configured to receive changes to at least one object in the external namespace [col 5, line 14-23, fig 3]; external namespace corresponds to foreign namespace as detailed in fig 3; the synchronization mechanism being configured to receive the change information in a first order that differs from a second order, the second order being the temporal order in

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which the changes occurred to the at least one object in the external namespace' [col 7, line 13-20], 'placeholder component being operative to avoid dangling references' [col 8, line 35-44], Thatcher specifically teaches namespace class file that provides an identifier to the corresponding module, further interface modules are programmed in JAVA language as detailed in col 8, line 40-44; it is noted that dangling references with respect to namespace is integral part of Thatcher's teachings because typically any link or pointer to instruction for example database table element, database index item that "no longer" exists in the entry "namespace name" corresponds to dangling references particularly when modules are programmed in JAVA languages [col 8, line 41-44], in other words, when a program contains a reference (or pointer) to a destroyed object is called a *dangling reference* (or dangling pointer) by disallowing the explicit destruction of objects, Java eliminates the problem of dangling references.

It is however, noted that Thatcher does not specifically teaches name resolving component being operative to avoid name collisions and the placeholder component being operative to avoid name collisions'. On the other hand, Karmanolis disclosed name resolving component being operative to avoid name collisions and the placeholder component being operative to avoid name collisions [page 2, col 2, 0031, page 6, col 1, 0071, 0072, and 0075, fig 8]

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Karamanolis et al. into aggregating

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disparate namespaces of Thatcher et al. because both Thatcher, Karamanolis are directed to firstly distributed network computer system [see Thatcher: fig 1; Karamanolis: fig 1], secondly, both are directed to synchronizing namespaces in a distributed computer environment [see Thatcher: col 6, line 43-50; Karamanolis: page 3, col 2, 0048, 9-116]; thirdly, both are specifically directed to namespace operations and associated namespace objects specifying the structure, entities, and relation between target and host [see Thatcher: fig 3; Karamanolis: fig 5-6], and both Thatcher, Karamanolis are from same field of endeavor.

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Karamanolis et al. into aggregating disparate namespaces of Thatcher et al. because that would have allowed users of Thatcher to performing namespace operations by incorporating "log records" to track events of both success as well as failure records as suggested by Karamanolis [see page 3, col 1, 0046], particularly conflicts between link and unlink operations, furthermore, resolving the conflicts before and after the initiated link operations related to same namespace and target objects [see Karamanolis: fig 8, page 6, col 1, 0075], also avoid locking distributed resources by serializing operations at each partition, thus bringing the advantages of "reduces communications overhead, reduces synchronous I/O and increases operations concurrency [see Karamanolis: page 2, col 1, 0025, line 12-14].

35. As to claim 26, Thatcher disclosed 'central namespace includes a plurality of object that are correlated to a corresponding plurality of objects in the external namespace' [fig 3, col 7, line 52-67]

36. As to claim 27, Karamanolis disclosed 'name collision comprises an error corresponding to two objects in the central namespace having similar names' [page 2, col 2, 0034].

37. As to claim 28, Karamanolis disclosed 'name resolving component comprises a pair of subspaces, one subspace for transient objects, and the other subspace for non-transient objects' [page 2, col 2, 0035].

38. As to claim 29, Karamanolis disclosed 'transient objects comprises objects that have been identified as having a name that is no longer valid' [page 3, col 1, 0045].

39. As to claim 30, Karamanolis disclosed 'non-transient objects comprise objects that have not been identified as having a name that is no longer valid' [page 3, col 1, 0046].

40. As to claim 31, Thatcher disclosed 'dangling reference comprises an error corresponding to one object in the central namespace referring to another object in the central namespace that does not yet exist'[col 9, line 58-66].

41. Claims 16-19, 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thatcher et al. [hereafter Thatcher], US Patent No. 6061743 published on May 9, 2000 of Karamanolis et al. [Karamanolis], US Pub.No. 20030131104, published on July 10, 2003 as applied to claims 13, and further in view of Eick et al. [hereafter Eick], US Patent No. 6154212, published on Nov 28, 2000.

42. As to claim 16, Thatcher disclosed 'wherein the representation of the entity comprises a second namespace' [fig 2-3]. It is however, noted that both Thatcher, Kkaramanolis do not specifically teach "phantom entity". On the other hand, Eick disclosed "phantom entity" [col 7, line 8-13].

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Eick et al. into aggregating disparate namespaces of Thatcher et al, and namespace management in a distributed file system of Karamanolis et al. because Thatcher et al, Karamanolis et al. and Eick et al are all directed to distributed networking environment particularly teaching user interfacing [see Thatcher: fig 1-3, col 3, line 38-49; Karamanolis: fig 1; and Eick: fig 2], and all the references are specifically directed to entity data structure [Thatcher: fig 3; Karamanolis: fig 5-6; Eick: fig 3].

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Eick et al. into aggregating disparate namespaces of Thatcher et al, and namespace management in a distributed file system of Karamanolis et al. because that would have allowed users of Thatcher, Karamanolis to implement the interface based on node and linking various namespaces in a hierarchical data structure, furthermore allowing users of Thatcher, Karamanolis to use interface programming of Eick configure to support a range of viewing functions that including identification, selection, collapse, expand, reposition and transforming of namespace related objects, also allows user to group sets of nodes and links into "phantom" aggregate node that including flags associated with each object using high-performance language for example C++[Eick: col 7, line 36-41], thus substantially reduces the time and expense associated with developing network interface in synchronized with the network data [Eick: col 3, line 12-24].

43. As to claim 17, Eick disclosed 'wherein the phantom entity includes a flag indicating the state of the phantom entity' [col 7, line 36-41].

44. As to claim 18, Thatcher disclosed "receiving a second indication of a second change to information in the first namespace and in response to the second indication, modifying the state' [col 8, line 52-60]. On the other hand, Eick disclosed 'phantom entity' [col 7, line 36-41].

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45. As to claim 19, Thatcher disclosed 'wherein the second indication comprises an instruction to create the entity in the second namespace' [col 9, line 22-31].

46. As to claim 32, Eick disclosed 'placeholder component comprises an identifier on a phantom object in the central namespace' [col 5, line 56-60, col 7, line 8-11].

47. As to claim 33, Eick disclosed 'phantom object comprises an object that is referred to by another object in the central namespace but which has not yet been formally created' [col 9, line 8-16].

48. Claim 24, is rejected under 35 U.S.C. 103(a) as being unpatentable over Thatcher et al. [hereafter Thatcher], US Patent No. 6061743 published on May 9, 2000 in view of Eick et al. [hereafter Eick], US Patent No. 6154212, published on Nov 28, 2000.

49. As to claim 24, Thatcher teaches a system which including 'a computer-readable medium encoded with a data structure' [col 3, line 50-62];

'a plurality of entities, each entity having a first field having a name, the name being unique across each entity in the data structure' [col 4, line 51-52, line 66-67, col 5, line 1-2, line 21-23, line 30-34], Thatcher specifically teaches distributed directory organized in a hierarchical structure representing various objects [see fig 2, col 5, line 30-34], further Thatcher also teaches data structure including schema having relationships between various objects having respective attributes and like as detailed in col 4, line 51-52;

'a second field having an identity, the identity being globally unique' [col 5, line 47-57, see table in col 5-6], Thatcher specifically teaches data structure partitioned that is having root objects, sub-tree and like defining unique reference that identifies object as detailed in 47-52];

'a third field having property being operative to distinguish between a first state of the entity and a second state of the entity' [col 6, line 1-27], Thatcher specifically teaches a table consisting of multiple partition and their association with distributed directory and their relationships. It is however, noted that Thatcher does not specifically

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teach 'phantom property'. On the other hand, Eick disclosed 'phantom property' [col 7, line 8-11, line 30-41].

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Eick et al. into aggregating disparate namespaces of Thatcher et al, because Thatcher et al, and Eick et al are all directed to distributed networking environment particularly teaching user interfacing [see Thatcher: fig 1-3, col 3, line 38-49; Eick: fig 2], and both references are specifically directed to entity data structure [Thatcher: fig 3;; Eick: fig 3].

one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Eick et al. into aggregating disparate namespaces of Thatcher et al, because that would have allowed users of Thatcher, to implement the interface based on node and linking various namespaces in a hierarchical data structure, furthermore allowing users of Thatcher to use interface programming of Eick configure to support a range of viewing functions that including identification, selection, collapse, expand, reposition and transforming of namespace related objects, also allows user to group sets of nodes and links into "phantom" aggregate node that including flags associated with each object using high-performance language [Eick: col 7, line 36-41], thus substantially reduces the time and expense associated with developing network interface in synchronized with the network data [Eick: col 3, line 12-24].

Conclusion


The prior art made of record

- a. US Pub.No. 6061743
- b. US Pub.No. 20030131104
- c. US Pub.No. 6154212

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc
Patent Examiner.
March 24, 2006


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PRIMARY EXAMINER